

IN THE SPECIFICATION:

Please substitute the following paragraph for the paragraph starting at page 1, line 12 and ending at page 2, line 6.

A reference numeral 1 refers to a display panel using a surface conduction type electro-emission device. Scanning lines Dx1 to Dxm in a row direction and modulation lines Dy1 to Dyn in a column direction are arranged in matrix, and electro-emission devices, not shown, are placed on the intersection points of the lines to form m rows and n columns of electro-emission devices. When an electric current ~~is flowed~~ flows through this device, electrons are emitted, wherein a non-linear characteristic shown in Fig. 16 is showed. For instance, when a voltage of 16 V is applied to the device, electrons are emitted, but when a voltage of 8 V is applied, almost no electrons are emitted. Then, the emitted electrons are accelerated by accelerating means, not shown, to cause the electrons to impinge on a fluorescent face, not shown, so that light is emitted. In other words, the device to which a voltage of 16 V is applied can emit light, but the application of 8 V that is half of it does not lead to light emission. Therefore, simple matrix driving is possible as shown in Fig. 17.

Please substitute the following paragraph for the paragraph starting at page 7, line 6 and ending at line 21.

By doing so, a vertical scaling filter characteristic of the converting circuit for converting scanning lines of the input video signal is changed in dependence on whether the first scan method or the second scan method is selected, and a vertical scaling filter characteristic in

the case of the first scan method is set to a characteristic of a weaker elimination effect on high frequency components as compared with a vertical scaling filter characteristic of the second scan method, whereby it is possible to provide a vertical spatial frequency response characteristic similar to that in the second scan method even in the case where the display apparatus operates in the first scan method, resulting in an inexpensive image display apparatus that can display bright and high-quality of images.

Please substitute the following paragraph for the paragraph starting at page 7, line 22 and ending at page 8, line 23.

The present invention can be arranged as an image display apparatus comprising: image display means including scanning lines, modulation lines and display devices driven through said scanning lines and modulation lines; a scanning circuit for supplying a scanning signal to said scanning line; a modulating circuit for supplying a modulation signal to said modulation line; selecting means for selecting a scan method of any of a first scan method and a second scan method, the first scan method being adapted to select a plurality of adjacent scanning lines in the same time during one selection period and select the same scanning line twice or more within one frame ~~which~~ while a set of scanning lines that are selected at the same time is changed, the second scan method being adapted to select one scanning line during one selection period and select the same scanning line only once within one frame; a filter circuit for subjecting image data to be displayed in said image display means to a filtering processing for eliminating high frequency components and supplying the subjected data to said modulation

circuit; and changing means for changing an elimination effect on the high frequency components in said filter circuit in accordance with the selected scan method, wherein a characteristic of said filter circuit in the case of said first scan method is a characteristic having a weaker elimination effect on high frequency components as compared with a characteristic of said filter circuit in said second scan method.

Please substitute the following paragraph for the paragraph starting at page 8, line 24 and ending at page 9, line 11.

In this way, a characteristic of the filter circuit for subjecting the image to a filtering processing is changed in dependence on whether the first scan method or the second scan method is selected, and a characteristic in the case of the first scan method is set to a characteristic of a weaker elimination effect on high frequency components as compared with a characteristic in the case of the second scan method, whereby it is possible to provide a vertical spatial frequency response characteristic similar to that in the second scan method even in the case where the display apparatus operates in the first scan method, resulting in an inexpensive image display apparatus that can display bright and high-quality of images.

Please substitute the following paragraph for the paragraph starting at page 9, line 16 and ending at line 17.

Fig. 2 is a timing chart of a repetitious scanning operation in the present invention.

Please substitute the following paragraph for the paragraph starting at page 11, line 6 and ending at line 13.

A reference symbol S12 refers to a switching signal inputted from a user interface means or the like, not shown, the switching signal being provided for switching between a normal scan and ~~a repetitious~~ an overlap scan. A reference numeral 7 refers to a resolution converting section for performing enlargement and reduction of the image. A reference numeral 12 refers to a resolution converting control section.

Please substitute the following paragraph for the paragraph starting at page 12, line 17 and ending at page 13, line 5.

Each scanning line Dxm is driven in such a manner that it is made active for two successive horizontal scanning periods and two lines of scanning lines are simultaneously selected for each horizontal scanning period. By so doing, it is possible to substantially double the brightness of the image displayed on the display panel (display means) 1. This driving manner for the first scan method will be hereinafter expressed as a “repetitious scan mode” (or “repetitious scan method”). On the other hand, there is another driving manner for the second scan method, in which only one line of the scanning lines is made active for one horizontal scanning period, and this driving manner will be expressed as a “normal scan mode” (or “normal scan method”). According to the present embodiment, these modes (or systems) can be selectively ~~carried~~ carried out.

Please substitute the following paragraph for the paragraph starting at page 15, line 25 and ending at page 16, line 4.

On the other hand, a display apparatus having a fixed pixel structure may often ~~curry~~ carry out a conversion of resolution for the purpose of adapting to any video signals in various specifications. In the conversion of resolution, there should be provided with some filtering effect for eliminating jaggy possibly caused in the conversion.

Please substitute the following paragraph for the paragraph starting at page 16, line 22 and ending at line 25.

Details about that will be described below. A book "~~considerable understanding of digital image processing~~" "Considerable Understanding of Digital Image Processing" (CQ publishing corp. published on August 20, 1997, the third edition) is can be consulted if necessary.

Please substitute the following paragraph for the paragraph starting at page 16, line 26 and ending at page 17, line 13.

In most cases, a conversion of resolution logically results in a configuration shown in Fig. 9, ~~whether for the actual configuration or not~~ whatever configuration it actually has. A sign $[↑n]$ refers to an n times up-sampler, $[H()]$ refers to a digital filter, $[↓m]$ refers to a $1/m$ down-sampler. In this configuration, resolution conversion of n/m times is obtained. In addition, a characteristic of $H()$ can lead to the nearest neighbor function for interpolation of the

same data, a bilinear function for making linear interpolation for two pieces of the original data, a bicubic function that is an interpolation method using the third order convolution, and other conversion characteristics. For example, the following are formulas in a $4/3$ times resolution conversion:

Please substitute the following paragraph for the paragraph starting at page 24, line 11 and ending at line 22.

Fig. 13 shows the spatial frequency characteristics of $H(\)$ and $H'''(\) \cdot J(2)$ just obtained in the case of $3/2$ times in the bicubic method. It can be seen that $H(\)$ nearly equals $H'''(\) \cdot J(2)$, and that the repetitious scan mode can also offer almost the same vertical spatial frequency characteristic as that in the bicubic method in the normal scan mode. Thus, a vertical spatial frequency characteristic $D'(\)$ of the image display apparatus in the vertical overlap scan method and a vertical spatial frequency characteristic $D(\)$ of the same in the repetitious normal scan method can be set to $D(\) = D'(\)$.

Please substitute the following paragraph for the paragraph starting at page 27, line 6 and ending at line 19.

A configuration of the apparatus refers to the image display apparatus in the first embodiment shown in Fig. 8. Except that a switching signal S12 for switching between the normal scan and the repetitious scan is always in the repetitious scan mode, the present invention can be applied to an image display apparatus that only provides a repetitious scan mode, as is the

case with a configuration of the image display apparatus in the first embodiment. A repetitious scan method used in the present invention merely requires pixels on a plurality of scanning lines to be active at the same time, and covers the case where pixels on a common scanning line are not active during two successive horizontal scanning ~~period~~ periods.

Please substitute the following paragraph for the paragraph starting at page 27, line 20 and ending at page 28, line 1.

As described above, according to the present invention, an image display apparatus that can ~~switching~~ switch between a repetitious scan method and a normal scan method can provide much the same vertical spatial frequency response characteristic as that in the normal scan method even during the operation in the repetitious scan method, and thereby an image display apparatus can be provided with a bright and high quality ~~of~~ image and with low cost.

Please substitute the following paragraph for the paragraph starting at page 28, line 2 and ending at line 8.

In addition, an image display apparatus that performs scanning only based on a repetitious scan method can also provide an optimal vertical spatial frequency response characteristic similar to that in an image display apparatus in a normal scan method, and thereby an image display apparatus can be inexpensively offered with a bright and high quality ~~of~~ image.